

**METHOD AND SYSTEM FOR TRANSMITTING PERIODIC
AND APERIODIC DATA OVER A CRITICAL AVIONICS DATABUS**

ABSTRACT

5 A network architecture (100) that supports periodic and aperiodic data transmissions over a network databus. The network (100) comprising a plurality of Network Interface Controller (NIC) modules (120, 169) configured to communicate with each other with at least one of the modules acting as a master NIC modules (120) and configured to allocate data transmission bandwidth on the network databus (114) using a set of priority sequences stored in a table(158) accessible by the master NIC (154) within the master timing NIC module (120). The table (158) is used by the master NIC (120) to allocate bandwidth on the network databus (114) after transmission of periodic data and according to priority, length and frame sequence. In this way, aperiodic data from some NIC modules is guaranteed a certain amount of bandwidth on the network databus (114).

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15 E:\Clients\Honeywell - 1180\2000\4th spec2000.wpd

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